

Lat: 58° 25' 24"
Long: 134° 34' 23"

Mendenhall Lake

Map. Juneau B-2

Description: Mendenhall Lake, located at the foot of Mendenhall Glacier, forms the headwaters of the Mendenhall River. The lake is glacial. It is easily reached via the Mendenhall Glacier Road. The lake serves as a migration route for numerous fish spawning in its various inlets. The lake itself was not surveyed, but most of its inlets were. The lake derives its name from Mendenhall Glacier, named after Prof. Thomas C. Mendenhall, of the USC&GS. The lake has also been known as McCush Lake after Neil McCush who had mining property near it (Orth, 1967).

Barriers: There are no barriers on the outlet river.

Species Present: Dolly Varden; rainbow trout; red, coho, and chum salmon; cottids; and stickleback.

Rearing Habitat: Mendenhall Lake is a wintering area for Dolly Varden, and rearing area for coho and red salmon. Although no traps were set, gill nets have been placed in the lake with the following results (all fish taken were Dolly Varden):

<u>Date</u>	<u>Net Hrs.</u>	<u>No.</u>	<u>Wt. Range (lbs.)</u>	<u>Length Range (in.)</u>
4/14/70	24	18	0.5 - 2.0	9 - 20
7/03/70	12	1	-	11 3/4
7/14/70	24	4	-	11 - 18
7/21/70	24	14	-	11 - 20
8/09/70	24	14	-	11 - 20

(40 feet of 3-inch stretch mesh net was used.)

Spawning Areas: The main spawning areas available are in the various inlet streams to the lake.

Planting History: None known in the lake itself.

Fishing History: Unknown, but the area is readily accessible by auto, and could offer a fair fishery.

References: Orth, 1967 (Location, historical data)

Mendenhall Lake Tributaries

NOTE: The following four streams are tributaries to Mendenhall Lake. They flow into the east side of the lake and are reached via a trail beginning at the parking area. Tributary #2 was not surveyed.

Tributary #1 Survey Date: 8/18/70

360

Location: East shore of Mendenhall Lake.

Description: Access to the stream mouth is excellent via a Forest Service trail. Accessibility up the stream itself is difficult due to the lack of a trail and heavy brush. The lower reaches of the creek consist of a flat glacial valley. The stream is very shallow, narrow, and clear. The bottom consists of medium to coarse gravel, and vegetation cover is extremely heavy, at times completely covering the overstory of the stream channel. At about 1/4-mile the stream becomes "Braided" for about 250 yards, and then starts "stair stepping" up the side of a hill. Banks begin to rise in this section and brush begins to thin out. At this point the bottom consists of some exposed slate and large boulders. The stream continues to "stair step" into a small canyon and its gradient increases. The bottom is primarily exposed slate with a few large boulders. The bank cover is thin, allowing easy walking. The stream continues up into a canyon becoming very steep with entirely exposed slate bottom, about at one mile upstream. No tributaries are present.

Barriers: There is a fish block in the form of waterfalls about one mile upstream.

Species Present: Dolly Varden; rainbow trout; coho, and red salmon.

Rearing Habitat:

Number of Areas: Logs 10, sloughs 0, undercut banks 11, pools 27.

Fish Observed:

<u>Dolly Varden</u>		<u>Coho</u>		<u>Unknown</u>	
<u>Fry</u>	<u>Fingerling</u>	<u>Fry</u>	<u>Fingerling</u>	<u>Fry</u>	<u>Fingerling</u>
62	0	55	62	12	16

Also one possible 6-inch rainbow was observed.

Average Catch/Trap (n=3): Dolly Varden = 6.33, coho = 0.66

Evaluation: The rearing potential in the first 1/2-mile section of stream is poor; no rearing areas are beyond this section as the stream has no pools or slough areas. The first 1/2-mile section has some small pools and shallow undercut banks; however, sheltered areas are insufficient to offer good rearing. Sampled fish indicated an anadromous Dolly Varden population (length: 89-113 mm, age I-III).

Spawning Areas:

Salmon Counts: None available. However, on the date of survey, 10 adult red salmon were observed.

Evaluation: Overall spawning potential is poor and restricted to the lower reaches of the stream. Upstream about 1/2-mile the streambed becomes exposed slate with large rocks dispersed throughout.

Planting History: None known

Fishing History: Unknown

Tributary #3

Survey Date: 8/18/70

Location: East shore, Mendenhall Lake

Description: The stream crosses the Forest Service trail, allowing easy access to the mouth. Accessibility upstream is limited by very dense brush for the first 1/4-mile. The streambed consists of medium to large gravel and the stream channel averages about 5 feet wide and 4-8 inches deep. No tributaries were encountered.

Barriers: A series of falls about 1/2-mile upstream form a fish block.

Species Present: Dolly Varden; cutthroat trout; red and coho salmon.

Rearing Habitat:

Number of Areas: Logs 0, sloughs 0, undercut banks 4, pools 16.

Fish Observed:

<u>Dolly Varden</u>		<u>Coho</u>		<u>Unknown</u>	
<u>Fry</u>	<u>Fingerling</u>	<u>Fry</u>	<u>Fingerling</u>	<u>Fry</u>	<u>Fingerling</u>
20	3	9	25	20	5

Average Catch/Trap (n=2): Dolly Varden = 3.5, coho = 8.0 cutthroat = 0.5

Evaluation: Overall rearing potential is poor due to lack of sloughs and suitable undercut banks. Most pools observed were small and shallow and would not offer adequate rearing areas.

Spawning Areas:

Salmon Counts: None available. On date of survey, one adult red salmon, and four large (12-14 inches) Dolly Varden were observed in the lower reaches.

Evaluation: Spawning areas are poor and limited to areas near the stream mouth.

Planting History: None known

Fishing History: Unknown

Tributary #4

Survey Date: 8/18/70

Location: Lat. 58°25'28" Long. 134°35'07" (east shore Mendenhall Lake)

Description: This stream is narrow (average width four feet) and shallow (average depth six inches) and is reached by the Forest Service trail. The trail bridges the creek about 1/4-mile upstream from the mouth. The bottom of the stream consists of medium to coarse gravel and the water is clear. The banks are very low with heavy growth making accessibility difficult. After the stream is crossed by the trail, it starts stair-stepping up a hill. At this point the bottom is mainly exposed shale and bank cover is dense. Between 1/4- and 1/2-mile upstream, a small tributary, or anabranch, enters the creek (unable to follow this branch far enough to determine whether it was a tributary or an anabranch). Both the main stream and branch become very steep at this point.

Barriers: A fish block occurs at a series of falls at about 1/2-mile upstream.

Species Present: Dolly Varden, rainbow trout, and coho salmon.

Rearing Habitat:

Number of Areas: Logs 0; sloughs 0; undercut banks, few very poor; pools, few, poor.

Average Catch/Trap (n=1): Dolly Varden = 3.0, coho = 1.0, rainbow = 1.0

Fish Observed: Only fish observed was one coho yearling.

Evaluation: The overall rearing potential for the system is poor. The current is swift and no areas are present to allow fish escapement.

Spawning Areas:

Salmon Counts: None available. During the survey, one adult red salmon was observed.

Evaluation: There are fair spawning areas from the stream mouth to the base of the falls.

Planting History: None known

Fishing History: Unknown

References: McConaghy, 1969 (Hydrologic data, location)

Tributary #5

Survey Date: 8/18/70

Location: East shore, Mendenhall Lake

Description: This stream averages about five feet wide and 6 inches deep, and has clear water. It is reached via the Forest Service trail, but accessibility upstream is poor due to heavy bank cover. The streambed consists of medium to coarse gravel. There is a falls at the point where the trail crosses the creek about 1/4-mile upstream.

Barriers: Falls at trail crossing are a total block.

Species Present: Dolly Varden, coho and red salmon.

Rearing Habitat:

Number of Areas: Logs 0, sloughs 0, undercut banks 8, pools 7.

Fish Observed: Only fish observed were two unknown fingerling.

Average Catch/Trap (n=2): Dolly Varden = 6.0, coho = 4.5

Evaluation: Little or no rearing areas are present in this system. It is almost a straight run from the falls to the mouth. Pools and undercut banks observed were very small and offered no rearing area.

Spawning Areas:

Salmon Counts: None available. During the survey one adult red salmon was observed.

Evaluation: There are fair spawning areas from the stream mouth to the base of the falls.

Planting History: None known

Fishing History: Unknown

Mendenhall River (111-50-50)

Survey Date: Not Surveyed

Location: Lat. 58°21'30" Long. 134°36'00" (8 miles NW of Juneau)